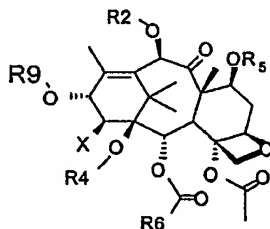


AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A compound of formula III



III

wherein

X is selected from the group consisting of $-N_3$, $-NH_2$, $-NH-R_3$ [[,]]
and $=CH-R_8$, ~~and $-O-R_3$ when R_6 is different from phenyl,~~

R_2 is hydrogen or acyl;

R_3 is C_1 - C_4 alkoxy carbonyl or, taken together with R_4 , forms a carbonyl, thiocarbonyl, SO, SO_2 group;

R_4 is hydrogen or, taken together with R_3 or R_8 , forms the groups specified in the respective definitions of R_3 and R_8 ;

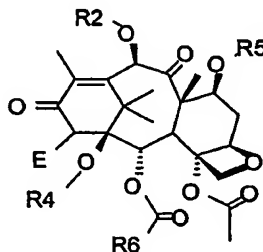
R_5 is hydrogen or an alcohol-protecting group;

R_6 is aryl, substituted aryl, heteroaryl, ~~with the proviso that R_6 is different from phenyl when $X = -OR_3$;~~

R_8 is hydrogen, C_1 - C_4 alkyl, C_1 - C_4 alkoxy carbonyl or, taken together with R_4 , forms a carbonyl group;

R₉ is an acyl or hydroxyaminoacyl group.

2. (currently amended) A process for the preparation of a compound of formula III from a compound of formula II

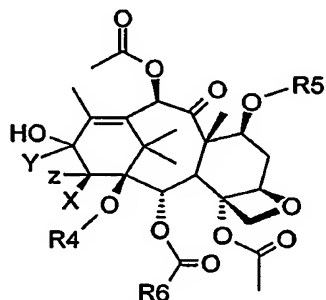


wherein

E is selected from the group consisting of -N₃, -NH-R₃[[,]] and =CH-R₈ ~~and -O-R₃ when R₆ is different from phenyl,~~ and R₂, R₅, R₄ and R₆ are as defined according to claim 1,

which process comprises:

a) reduction of the C13 carbonyl to give compounds of formula VII



VII

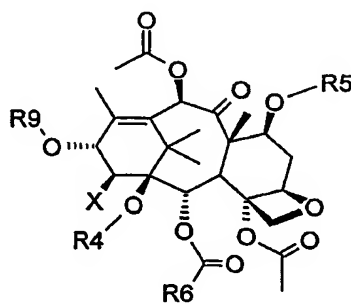
wherein

X is ~~-O-R₃~~-N₃, -NH-R₃, -CH₂-R₈;

Y and Z are hydrogen or, when X is -CH₂-R₈, are taken together to form a double bond;

and the other groups are defined as above;

b) esterification at the 13-position with derivatives of acids of formula IX to give compounds of formula VIII



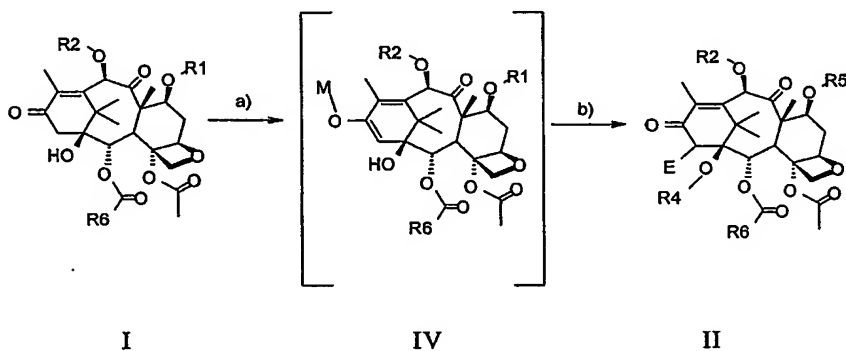
VIII

wherein

R₄, R₅, R₆, R₉ and X are as defined above;

c) optional cleavage of the protective groups.

3. (currently amended) A process for the preparation of a compound of formula II from a compound of formula I,



wherein R₁ is an alcohol-protecting group;

R₂ is an acyl group or an alcohol-protecting group;

E is $-\text{O}-\text{R}_3$, $=\text{N}_2$, $-\text{N}_3$, $-\text{NH}_2$, $-\text{NH}-\text{R}_3$, $-\text{NH}-\text{NH}_2$, $-\text{NH}-\text{N}=\text{N}-\text{Ts}$, $-\text{NH}-\text{N}=\text{N}-\text{Boc}$, $-\text{N}(\text{CO}_2\text{R}_7)\text{NHCO}_2\text{R}_7$, $=\text{CH}-\text{R}_8$;

Ts is p-toluenesulfonyl;

R₃ is C₁-C₄ alkoxy carbonyl or, taken together with R₄, forms a carbonyl, thiocarbonyl, SO, SO₂ group;

R₄ is hydrogen or, taken together with R₃ or R₈, forms the groups specified in the respective definitions of R₃ and R₈;

R₅ is hydrogen or an alcohol-protecting group;

R₆ is aryl, substituted aryl, heteroaryl;

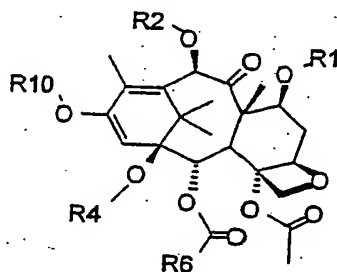
R₇ is a C₁-C₄ alkyl, aryl or arylalkyl group,

R₈ is hydrogen, C₁-C₄ alkyl, C₁-C₄ alkoxy carbonyl or, taken together with R₄, forms a carbonyl group,

which process comprises:

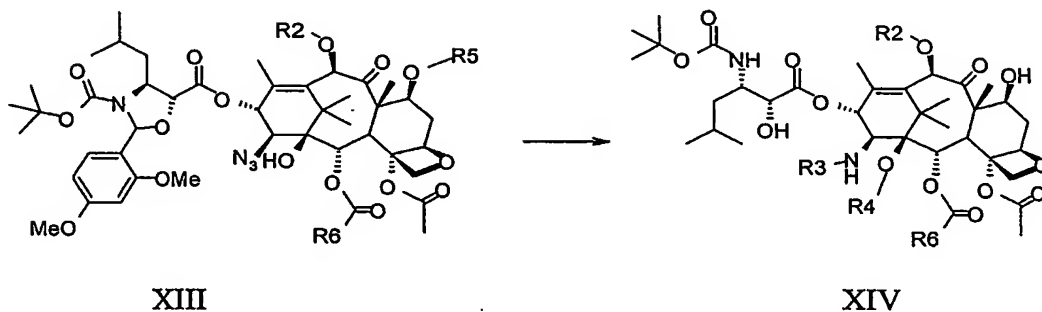
a) treating the 7-protected 13-ketobaccatin of formula I with bases to form an enolate intermediate of formula IV;

b) quenching the enolate IV with a suitable electrophile which can be converted to an E group or with an acylating, alkylating or silylating agent to give compounds of formula V



wherein R₁₀ is an alkyl, acyl or silyl group, which can then be converted into compounds II.

4. (previously presented) A process for the preparation of a compound of formula XIV starting from a compound of formula XIII



wherein

R₂ is an acyl group or an alcohol-protecting group;

R₃ is hydrogen, acyl, alkyl or, taken together with R₄, forms a C=O, C=S, SO, SO₂ group;

R₄ is hydrogen or, taken together with R₃, forms a C=O, C=S, SO, SO₂ group;

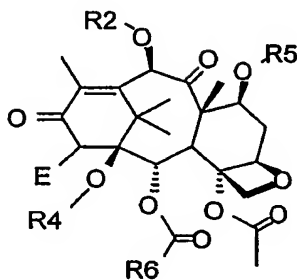
R₅ is hydrogen or an alcohol-protecting group;

R₆ is aryl, substituted aryl, heteroaryl;

comprising:

- a) selective reduction of the azido group to amino group;
- b) optional treatment with alkylating or acylating agents;
- c) cleavage of the C7 protective group;
- d) opening of the oxazolidine.

5. (currently amended) A compound of formula II



II

wherein

~~E, R₂, R₄, R₅ and R₆ are as defined according to claim 3~~ R₂ is an acyl group or an alcohol-protecting group;

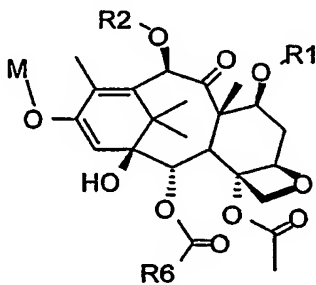
E is =N₂, -N₃, -NH₂, -NH-R₃, -NH-NH₂, -NH-N=N-Ts, -NH-N=N-Boc, -N(CO₂R₇)NHCO₂R₇, =CH-R₈;

R₄ is hydrogen;

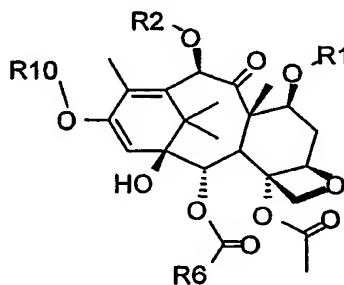
R₅ is hydrogen or an alcohol-protecting group;

R₆ is aryl, substituted aryl, heteroaryl.

6. (currently amended) A compound of formula IV or V



IV



V

wherein

M is an alkali metal;

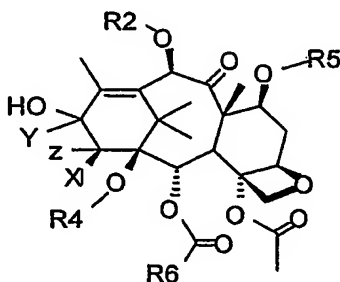
R₁₀ is an acyl, alkyl, silyl or phospho group;

~~R₁, R₂, R₆ are defined according to claim 3~~ wherein R₁ is an alcohol-protecting group;

R₂ is an acyl group or an alcohol-protecting group; and

R₆ is aryl, substituted aryl, heteroaryl.

7. (currently amended) A compound of formula VII



VII

wherein

~~R₂, R₄, R₅, R₆, X, Z and Y are as defined according to claim 2~~ R₂ is hydrogen or acyl;

R₄ is hydrogen;

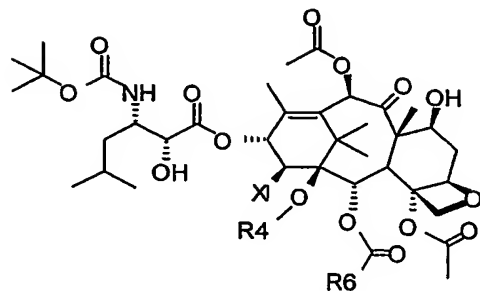
R₅ is hydrogen or an alcohol-protecting group;

R₆ is aryl, substituted aryl, heteroaryl;

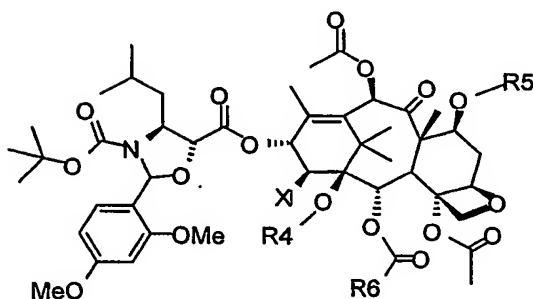
X is -N₃, -NH-R₃, -CH₂-R₈; and

Y and Z are hydrogen or, when X is -CH₂-R₈, are taken together to form a double bond.

8. (currently amended) A compound of formula XI or XII



XII



XI

wherein

X is selected from the group consisting of $-N_3$, $-NH-R_3$ and $=CH-R_8$, and $O-R_3$ when R_6 is different from phenyl;

R_3 is an alkoxy carbonyl or, taken together with R_4 , forms a carbonyl, thiocarbonyl, SO, SO_2 group;

R_4 is hydrogen or, taken together with R_3 or R_8 , forms the groups specified in the respective definitions of R_3 and R_8 ;

R_6 is aryl, substituted aryl or heteroaryl;

R_5 is hydrogen or an alcohol-protecting group;

R_8 is hydrogen, C_1 - C_4 alkyl, C_1 - C_4 alkoxy carbonyl or, taken together with R_4 , forms a carbonyl group.